BAR CODE MEDICATION ADMINISTRATION (BCMA)

MANAGER'S USER MANUAL

Version 3.0
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Department of Veterans Affairs
VistA Health Systems Design & Development

Revision History

Each time this manual is updated, the Title Page lists the new revised date and this page describes the changes. If the Revised Pages column lists "All," replace the existing manual with the reissued manual. If the Revised Pages column lists individual entries (e.g., 25, 32), either update the existing manual with the Change Pages Document or print the entire new manual.

Date	Revised Pages	Patch Number	Description
08/2006	iii, 12-13, 15, 31, 44a-b	PSB*3*13	–Update Table of Contents to include new section "Running the Unknown Action Status Report." (p. iii) – Updated the "Site Parameters Available Using Parameters Tab" screen shot to include the new "Unknown Actions" parameter in the Mail Groups section and the Patch Display Duration parameter in the Include Schedule Types section**.** (p. 12) – Added description of the "Unknown Actions" mail group parameter. (p. 13) – Added description of the "Patch Display Duration" parameter. (p. 15) – Updated BCMA Manager Menu to display new Unknown Action Status Report option. (p. 31) –Added section for "Running the Unknown Status Report." (p.44a-b) (R. Singer, PM; M. Newman, Tech Writer)
08/2006	14	PSB*3*2	**Note**: The functionality listed below will be activated with the release of PSB*3*2. Updated Bar Code Options Area section. Removed specific references to Zebra printer, to accommodate new feature to support multiple bar code printers. (p. 14) (R. Singer, PM; M. Newman, Tech Writer)
10/2004	12-13, 51-52	PSB*3*3	– Updated the "Site Parameters Available Using Parameters Tab" example to include the new Reports Area and related site parameters. (p.12). – Added the "Include Comments" and "Med Hist Days Back" site parameter information under the Reports Area. (p.13) – Updated the Index to include the new Reports Area and related site parameters. (p. 51-52) (R. Singer, PM; M. Newman, Tech Writer)
02/2004			Original Released BCMA V. 3.0 Manager's User Manual (R. Singer, PM; M. Pospisil, Tech Writer)

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Defining and Updating Site Parameters for Your Division (cont.)

TIP:

Modifying the "BCMA On-line" parameter affects *all* users signing on to your division. Multi-division sites must disable access to each site.

Working with the Facility Tab

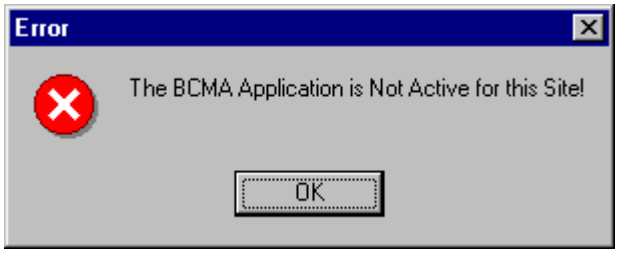
The Facility Tab, on the BCMA Site Parameters Main Screen, provides the following functions:

- **Facility Information (Read-Only):** This area provides read-only information populated by the INSTITUTION file (#4).
- **BCMA On-Line:** This option (check box) under the "BCMA Status for Division" section lets IRM personnel enable or disable all GUI BCMA options. It does *not* affect CHUI BCMA options.

  If the "BCMA On-Line" check box is checked, the system is on-line and all GUI BCMA options are available.

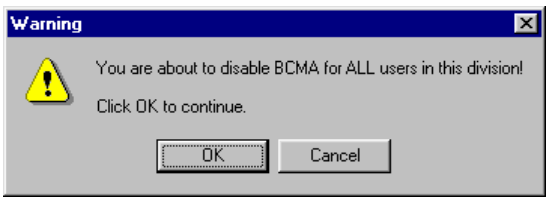
  If the "BCMA On-line" check box is *not* checked, all users currently logged on to GUI BCMA options will *not* be affected. However, when a user attempts to log on to the GUI options, the following Error mesasge displays:

Example: Error Message When BCMA Not Active for Your Site



If the "BCMA On-Line" check box is checked and you try to take it off-line by deselecting the check box, the following Warning message displays:

Example: Warning Message When All BCMA Users Are Being Disabled for Your Division



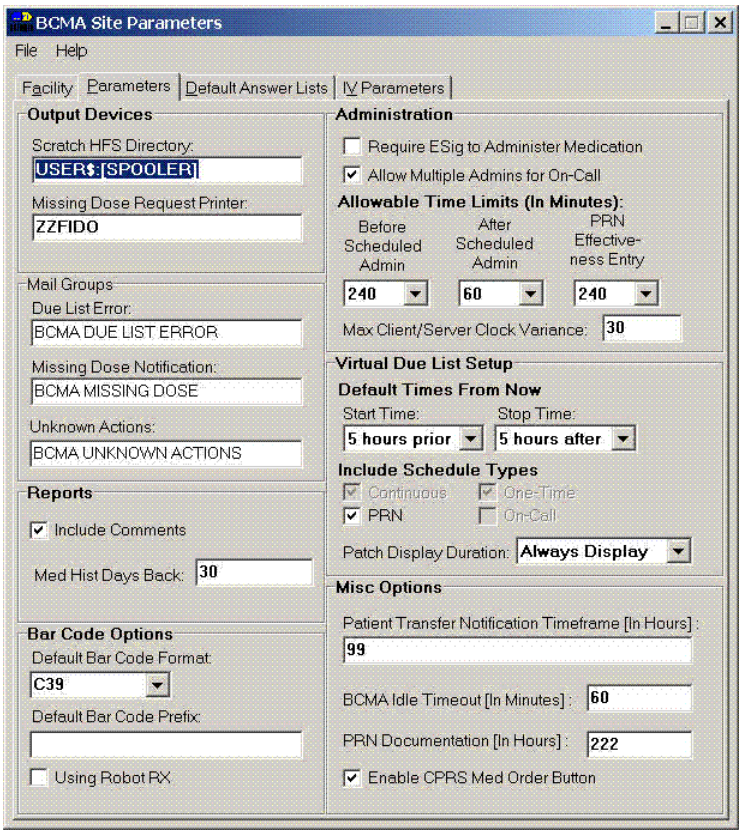
Defining and Updating Site Parameters for Your Division (cont.)

Working with the Parameters Tab

You can activate the Parameters Tab by placing the cursor over the Tab, and then clicking once on it. Doing so activates the site parameters for this Tab.

This section describes the fields and check boxes available on the Parameters Tab.

Example: Site Parameters Available Using Parameters Tab



- **Output Devices Area**
  - **Scratch HFS (Host File Server) Directory:** This field lists the directory accessible to all BCMA V. 3.0 users, required at every division running BCMA. The directory includes reports that BCMA V. 3.0 generates and retrieves.
    - **If the field is blank,** BCMA V. 3.0 uses the Default Directory for the HFS entry in the Kernel SYSTEM PARAMETERS file.

Defining and Updating Site Parameters for Your Division (cont.)

Working with the Parameters Tab (cont.)

- **Output Devices Area (cont.)**
  - **Missing Dose Request Printer:** This field identifies the default division printer for Missing Dose requests.
- **Mail Groups Area**
  - **Mail Groups:** This area lists the mail groups that must be created using the **V*IST*A** *Mail Group Edit* [XM EDIT MG] option, and by setting the TYPE field to PUBLIC. BCMA V. 3.0 includes the following mail groups listed below:
    - **Due List Error:** This field generates an E-mail message for any medication order that BCMA cannot resolve for VDL placement, and sends it to the mail group members. An example might include no administration times entered for a Continuous order.
    - **Missing Dose Notification:** This field generates an E-mail message for any Missing Dose Request entered using the BCMA CHUI or GUI menu options. The E-mail is sent to all members of the mail group, specifically Pharmacy, as a "fail safe" even if the designated Missing Dose printer is not functioning.
    - **Unknown Actions:** This field generates an E-mail message for any administration with an "Unknown" status while processing administrations to display on the VDL.
- **Reports Area**
  - **Include Comments:** This check box, when selected, will automatically check the "Include Comments" check box in the Report dialog box as the default setting for the Medication History Report and the Medication Log Report. If this parameter is unchecked, the "Include Comments" check box will be unchecked, by default, in the related Report dialog box. Users can choose to change the check box setting in the Printer dialog box as needed, depending on whether they wish to have the comments for the administration included on the report.
  - **Med Hist Days Back:** This field lets you define the number of days in the past, from the current system date, that the Medication History Report should retrieve data. The allowable entry for this parameter is 1 to 9999 days. The default is 30 days.
    - A user can change the date range, for the report, in the Report dialog box.

Defining and Updating Site Parameters for Your Division (cont.)

Working with the Parameters Tab (cont.)

- **Bar Code Options Area**
  - **Default Bar Code Format:** This field lets you select the desired bar code format that you want to produce on the bar code label printer. The following options are available from a drop-down list box: C39, 128, and I25.
  - **Default Bar Code Prefix:** This field lets you specify up to five alphanumeric characters of text that will print as a prefix on a bar code label printed on the bar code label printer.
  - **Using Robot RX:** This check box should be checked *only* if your site is using the Robot RX product.
- **Administration Area**
  - **Require ESig To Administer Medication:** This check box requires that users enter the Access/Verify and Electronic Signature Code (ESig) before launching GUI BCMA. Otherwise, the clinician administering medications will be asked for Access/Verify codes only.
  - **Allow Multiple Admins for On-Call:** When checked, your division allows multiple administrations for an On-Call order.
  - **Allowable Time Limits (In Minutes):** This parameter defines the allowable medication administration window. In the example provided, the allowable window is set to a little more than two hours before through one hour after the scheduled administration time. Each window may be defined up to 240 minutes.
    - **PRN Effectiveness Entry:** This parameter defines the allowable time for the PRN Effectiveness to be assessed, after a PRN medication is given by a clinician, and before a variance is logged. If a medication administration is outside the allowable time, a variance will be logged when the effectiveness is entered. You can define this window up to 240 minutes.
  - **Max Client/Server Clock Variance:** This field lets you specify the number of minutes allowed for a variance, between the Client clock and the Server clock time.
    - **If outside the range,** a Warning message displays.

Defining and Updating Site Parameters for Your Division (cont.)

TIP:

The Continuous, One-Time, and On-Call Schedule Type parameter check boxes are "checked" and "disabled"to ensure that these Schedule Types automatically display on the CHUI Due List and on the BCMA VDL.

Working with the Parameters Tab (cont.)

- **Virtual Due List Setup Area**
  - **Default Times from Now:** This option lets you enter the number of hours before and after NOW that GUI BCMA will initally display orders on a patient's VDL (i.e., patient record).
  - **Include Schedule Types:** These check boxes let you select the default display for the CHUI Menu Option [PSBO DL] Due List and the BCMA VDL. The PRN check box controls the default display of PRN medications on the VDL. Your VAMC can choose to have the PRN Schedule Types display on the VDL by default, or to display PRN medications once the clinician selects the PRN Schedule Type check box on the VDL. All other Schedule Types will display by default and cannot be changed.
    - Individual client settings are not allowed.
    - **Patch Display Duration**: This field lets you specify the number of days after an order's Stop Date that a "Given" patch will continue to display on the VDL and Cover Sheet. The allowed values are: Always Display and 7-14 days. The display date will be calculated by adding the number of days defined in the site parameter to the Stop Date of the order. If the value of the site parameter is Always Display, then the patch will continue to display on the VDL until it is marked as removed using the Due List–regardless of the order Stop Date. The default is Always Display.
- **Misc Options Area**
  - **Patient Transfer Notification Timeframe:** This field lets you define the number of hours, before the current system time, that a patient movement must be less than for the movement type (usually a transfer) to display on the BCMA VDL. The allowable entry for this parameter is a minimum value of 2 and a maximum value of 99. The default is 72 hours.
    - Individual client settings are not allowed.

Defining and Updating Site Parameters for Your Division (cont.)

TIP:

Users can double click on the PRN Effectiveness Activity in the BCMA Clinical Reminders marquee to document ALL PRN medication orders needing effectiveness documentation.

Working with the Parameters Tab (cont.)

- **BCMA Idle Timeout (In Minutes):** This field lets you define the number of minutes that an idle BCMA session can stay open. Once the allowable time-out has been reached, BCMA will close. The allowable entry for this parameter is 1 to 1440 minutes. The default is 30 minutes.
  - ➢ If the BCMA session displays a prompt, it will not time-out.

➢ **Misc Options Area**

- **PRN Documentation (In Hours):** This field lets you define the minimum number of hours from NOW that BCMA V. 3.0 will search for PRN medication orders needing effectiveness comments. The four most recent PRN orders that need documentation display within the PRN Effectiveness mouse-over list in the "BCMA Clinical Reminders" marquee, which is located in the lower, right-hand corner of the VDL. BCMA displays PRN medications based on the current admission or the site parameter timeframe (whichever is greater). The allowable entry for this parameter is a minimum value of 1 and a maximum value of 999. The default is 72 hours.
  - ➢ Individual client settings are not allowed.
- **Enable CPRS Med Order Button:** Selecting this button allows clinicians to use the CPRS Med Order Button in BCMA V. 3.0 to electronically order, document, review, and sign verbal- and phone-type STAT and NOW (One-Time) medication orders that they are administering to patients.
  - ➢ Clinicians can access the CPRS Med Order Button functionality only if they hold the PSB CPRS MED BUTTON security key.
  - ➢ Clinicans must be able to accept and sign orders in CPRS to use the CPRS Med Order Button functionality in BCMA V. 3.0.

Accessing the CHUI BCMA Manager Menu

TIP:

You must hold the PSB MANAGER security key to access the BCMA Manager Menu.

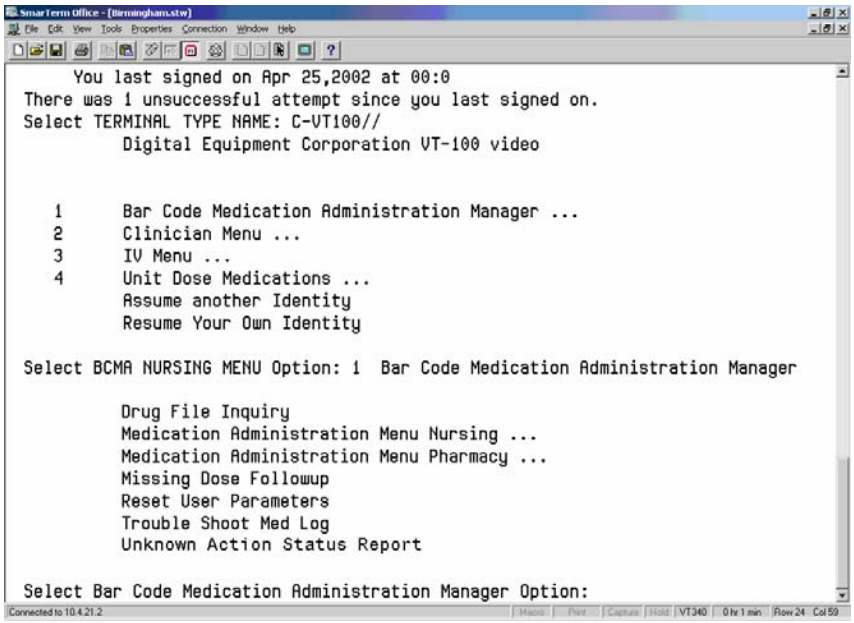
You can use the *Bar Code Medication Administration Manager* menu to access information entered by clinicians via the BCMA VDL within CHUI BCMA V. 3.0. You can access this menu option from any VistA-enabled terminal within your VAMC.

Because BCMA operates in real time, scanned patient and medication information is available as soon as the "scan" is successfully completed using GUI BCMA.

To access the CHUI BCMA Manager Menu

1 At a VistA-enabled terminal, enter your **Access and Verify Codes** when prompted by the system. The menus available to you will then display.

Example: Accessing the CHUI BCMA Manager Menu



2 At the "Select BCMA NURSING MENU Option:" prompt, type **BAR**, and then press **<Enter>** to access the *Bar Code Medication Administration Manager* menu. The options available to you then display.

3 At the "Select Bar Code Medication Administration Manager Option:" prompt, enter the **text of the desired option**, and then press **<Enter>**. The Main Screen for the associated option then displays.

Creating a Listing of Unknown Actions

TIP:

Adiminstrations with an Unknown action status also display on the BCMA VDL and Cover Sheet in the GUI.

You can use the *Unknown Action Status Report* [PSBO XA] option from the *Bar Code Medication Administration Manager* menu to print a listing of administrations that have an unknown action status. When a user is in the process of documenting an administration in *Manual Medication Entry* [PSB MED LOG NEW ENTRY], the administration status initially defaults to blank (null). If the order is not completed with a valid administration status, the Admin Status will be listed as unknown, and appear on the Unknown Action Status Report.

The unknown (null) status can occur during *Manual Medication Entry* when the user's network connection is broken, their terminal emulator software malfunctions, or if the user improperly exits out of the application.

Use the BCMA GUI Edit Med Log to correct the administration status of any entries found on this report.

Note: This report is only accessible to users with the PSB MANAGER security key.

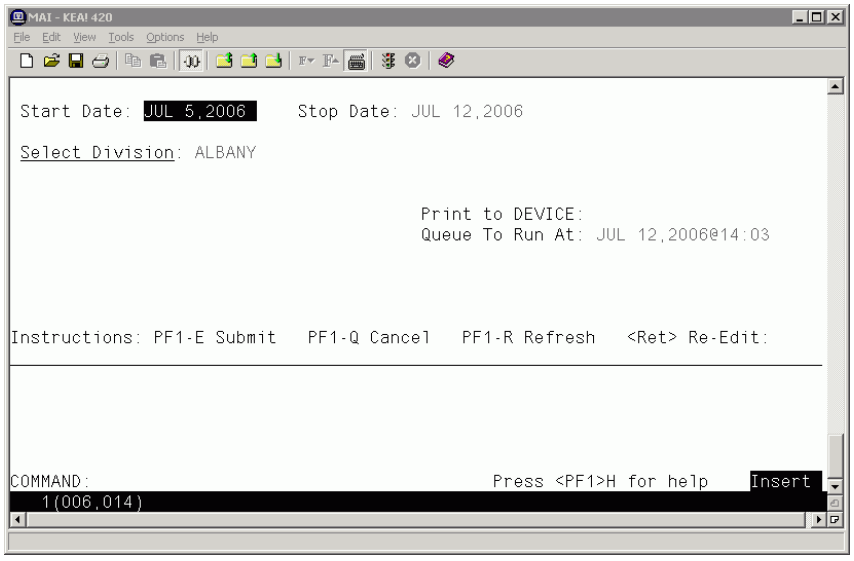
To run the Unknown Action Status Report

1. At the *Bar Code Medication Administration Manager* menu, type **U**, and then press **<Enter>** to access the *Unknown Action Status Report* [PSBO XA] option. The associated screen then displays.

TIP:

The CHUI version of this report allows the user to select by Division.

Example: Unknown Action Status Report Report Criteria Screen



Creating a listing of Unknown Actions (cont.)

2 At the "Report Criteria" screen, enter the desired Start Date, Stop Date, Division, and Print to DEVICE fields. Note the Start Date defaults to Today minus 7 days, and the Stop Date defaults to today.

3 Press <PF1> E to run the report. A sample report is shown below.

Example: Unknown Action Status Report

```
BCMA UNKNOWN ACTION STATUS REPORT
Page: 1 of 1
Date/Time: JUL 12, 2006@13:18:38
Report Date Range:  Start Date: JUL 01, 2005   Stop Date: JUL 12, 2006
Division: ALBANY
Total *UNKNOWN* entries found: 1
     This is a report of entries, created within the given date range,
     in the BCMA Medication Log File with UNKNOWN Action Status data.
     These entries can be corrected using the BCMA GUI "Edit Med Log".

================================================================================

1.)
     Action Status...: *UNKNOWN*
     Patient.........: (000009678) BCMAPATIENT, ONE
     Ward/Bed........: GENERAL MEDICINE
     Order Number....: 2U
     Orderable Item..: VITAMIN E CAP, ORAL
     Schedule........: Q4H
     Scheduled Adm Tm: JULY 12, 2006@17:00
     Created Dt/Tm...: JULY 12, 2006@13:06:26
     Created By......: (10000000035) BCMANURSE,ONE
--------------------------------------------------------------------------------
```